

Smart Grid Northwest Comments

Issue Paper: Demand Response Advisory Committee Scope

June 15, 2016

Smart Grid Northwest commends the Power and Conservation Council's proposed direction for the Demand Response Advisory Committee (DRAC) and the recommended creation of the System Integration Forum. While the regional energy system and marketplace continues to evolve, bringing on resources that offer flexibility will ensure that the region's energy system remains low-cost and reliable as it has for the decades past.

Smart Grid Northwest strongly urges that the Council approve the formation and scope of the DRAC as important demand side resources can cost-effectively support critical regional system needs. We also strongly support the creation of the Systems Integration Forum, to cut across and engage various Advisory Committees and other industry forums on vital topics to ensure that various energy resources effectively leverage and support the regional energy system.

Our comments are organized in two sections:

1. Demand Response Advisory Committee
2. System Integration Forum

Demand Response Advisory Committee (DRAC)

Smart Grid Northwest appreciates the Council's leadership in bringing demand response (DR) resources front and center for regional energy stakeholders in the 7th Power Plan. Many other parts of the country have a significant head start on our region, as a result of our past reliance on abundant hydro resources; however we now need to develop more demand side resources to better match energy use with energy supply. The region is in a unique position to leverage lessons, policies, programs and technologies that have been pioneered elsewhere and can be adapted to the Northwest. We look forward to the progress that the DRAC will make to assist the region as demand side resources play an increasing role in the regional energy system.

Our comments/suggestions for the proposed DRAC scope include:

1. While we are generally supportive of the proposed scope the DRAC, we want to offer special support for the examination of policies (point B) that can have a near term impact in the region to encourage demand response by overcoming barriers to development. While this is important for mid and longer-term market activity, we are pleased to see this work on policy in the proposed scope of DRAC in the short term as well. Some of the critical barriers to address are consistency in

- regional policies related to DR programs and valuation; standards and codes; the facilitation of standardized technical solutions; and the penetration of DR resources at local, utility and regional levels.
2. We agree that supporting peak reduction is a very important benefit of DR. We also continue to encourage the Council and the DRAC to adopt a broad definition of DR that recognizes the full range of benefits that DR can offer the region. Examples include enhancing or supporting energy storage, balancing services, deferred/reduced infrastructure investments, grid resiliency, and oversupply mitigation.
 3. Smart Grid Northwest encourages the Council to consider initiating the study of DR potential (point E part 1), which identifies a baseline assessment of resources, to an earlier timeline before mid 2018. As the DRAC identifies various barriers and prioritizes policy elements, this study will be an important companion to demonstrate the resource potential. An expanded or updated version of the study can certainly be conducted at a later date as implementations and market structures become more supportive of demand response resource valuation and development.

System Integration Forum

Smart Grid Northwest offers our strong support for the Council's recommended creation of the System Integration Forum.

The Council rightly states that "the regional power system may be approaching its limits to adequately provide both the [cost-effective] peaking and flexibility capability needed for a reliable power supply." Beyond demand response, resources including energy storage, solar PV, small wind, CHP, and other distributed generation may offer additional system flexibility and reliability at lower cost. Additionally integrating technologies for distributed and central resources alike through various smart grid infrastructure (hardware, software, as well as analytics) and asset utilization strategies such as transactive energy controls will also help to ensure that cost-effective management of the energy system is maintained.

Our one main comment in this area is that we would encourage the Council to initiate the System Integration Forum before 2018, and ideally within the next 12 months. With a number of meaningful developments happening across the regional energy system in the short term, the following activities justify getting the System Integration Forum operational sooner than proposed:

- a. Progress happening in the development of structured markets in the West (CAL/Western ISO) with many of the major regional IOUs (Pacific Power, Puget Sound Energy, Portland General Electric, Idaho Power, and others) already working actively on integration

- b. Significant renewable energy mandates in the West that will impact regional energy systems (notably the 50% RPS passed in 2015 in Oregon and California).
- c. Volatility of hydro energy resource availability (for example the extremely low snow pack in 2015 and the associated climate implications)
- d. Early retirement of a number of base load energy resources (mainly coal plants)
- e. Significant level of advanced metering (AMI) deployments in the next few years as Seattle City Light, Avista, Pacific Power roll out their installations and others consider this investment, adding to the utilities including PGE, Idaho Falls, Idaho Power, Kootenai Electric, Flathead Electric, Central Lincoln, Consumers Power, Cowlitz County PUD, Peninsula Light, and at least 29 others who already have fully implemented this infrastructure to date
- f. Transactive energy controls demonstration projects with a number of regional utilities
- g. Existing and proposed energy storage projects across the region, including at utilities such as Snohomish PUD, Avista, and PGE, and potentially others based on funding availability from the WA Clean Energy Fund and Oregon's recent energy storage mandate
- h. Distributed energy resource levels continuing to proliferate (solar, electric vehicles, connected and responsive devices, etc.) and the rapid evolution of experience, policies and technology for DER integration nationally and worldwide that can be tracked and considered in terms of the region.
- i. Resiliency for disaster recovery. There is growing regional understanding and concern about implications for the region's power system should a major disaster occur. Recently, the region has focused more attention on the potential occurrence of a major earthquake or the potential risk of another major volcanic eruption. Terrorist attacks are yet another concern. It is imperative that the region address the critical issues around survivability of a major disruption by undertaking actions to make the power grid more resilient. There may be an important role for microgrids, demand response, storage, smart inverters, and other technologies in increasing power grid resiliency and recovery that needs to be recognized.

Finally, Smart Grid Northwest would like to extend an invitation to the Council to use our September 28, 2016 Demand Response Symposium in Seattle as a platform for introducing the DRAC and System Integration Forum to a broader set of stakeholders.

Smart Grid Northwest would welcome the opportunity to work with the Council by serving on the Demand Response Advisory Committee, the System Integration Forum, and by providing ideas of professionals who may also serve in a supporting capacity.

We hope these comments are taken with the understanding that we support the Council's direction for both the Demand Response Advisory Committee and the System Integration Forum. However these additional suggestions would further strengthen the impact they can have.

Respectfully Submitted,



Bryce Yonker
Smart Grid Northwest, Executive Director



James Mater
Smart Grid Northwest, Board Chair

About Smart Grid Northwest

Smart Grid Northwest is the only multi-state trade organization in the country working to progress smart grid industry and solutions. Founded in 2009, the organization expanded its focus to the broader Northwest in 2014. The organization has a growing member base of over 70 organizations from investor and consumer-owned regional utilities, growth grid modernization technology companies, leading industry corporations, higher education and research organizations, regional and national government agencies, and other stakeholders. Additional information about Smart Grid Northwest can be found at www.smartgridnw.org



Smart Grid Northwest
2705 E Burnside St. #212
Portland, OR 97214
www.smartgridnw.org

Bryce Yonker
Executive Director
by@smartgridnw.org
503.206.8448